

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/964,838	09/28/2001	Magnus N. Nilsson	TPP 31424	3731
7590 09/20/2007 STEVENS, DAVIS, MILLER & MOSHER, L.L.P.			EXAMINER	
Suite 850		HUSON, MONICA ANNE		
1615 L Street, I Washington, Do			ART UNIT '	PAPER NUMBER
	•		1732	
			MAIL DATE	DELIVERY MODE
	•		09/20/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/964,838 Filing Date: September 28, 2001 Appellant(s): NILSSON ET AL.

MAILED SEP 2 0 2007 GROUP 1700

Thomas Pavelko <u>For Appellant</u>

EXAMINER'S ANSWER

This is in response to the appeal brief filed 16 March 2007 appealing from the Office action mailed 14 August 2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

4,092,198	Scher et al.	05-1978
5,344,692	Schmoock	09-1994
6,238,750	Correll	05-2001
3,196,030	Petry	07-1965
5,961,903	Eby et al.	10-1999
5,948,309	Greten et al.	03-1996
5,804,116	Schmid et al.	09-1998
6,399,670	MacQueen et al.	06-2002
6,354,915	James et al.	03-2002

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(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1 and 32 are rejected under 35 USC 103(a) as being unpatentable over Scher et al. (U.S. Patent 4,092,198), in view of Schmoock (U.S. Patent 5,344,692). Regarding Claim 1, Scher et al., hereafter "Scher," show that it is known to carry out a method for the manufacture of a decorative surface element, which element comprises a base layer, a décor layer of a lacquer, and a wear layer (Abstract), the process comprising the steps positioning one or more structured rollers or molds on top of the lacquer, the one or more rollers or molds provided with embossing rollers (Column 5, lines 3-13; Column 6, lines 50-64), pressing said one or more rollers or molds into said lacquer, whereby the lacquer will be provided with a surface structure, thereby enhancing the decorative effect of the décor (Column 6, lines 50-64; Column 7, lines 36-68), and thereafter curing the wear layer (Column 10, lines 6-18). Scher does not show using a UV curable resin in his decorative surface element. Schmoock shows that it is known to carry out a method for making a decorative surface element using a layer of UV curing lacquer that is cured by applying a UV beam (Column 4, lines 11-13). Schmoock and Scher are combinable because they are concerned with a similar technical field, namely that of methods of making decorative surface elements that have structured surfaces. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Schmoock's UV curing lacquer as a layer in Scher's decorative element in order to enable the article to be cured by methods other than convection.

Regarding Claim 32, Scher shows the process as claimed as discussed in the rejection of Claim 1 above, but he does not show using one or more rollers that are pressed towards the surface structured wear layer before the complete curing stage. Schmoock shows that it is known to use one or more rollers that are pressed towards the surface structured wear layer before the complete curing stage (Column 12, lines 4-34). Although Schmoock does not specifically use glazing rollers, it would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use any configuration of Schmoock's rollers during Scher's molding process in order to obtain a desired final finish of the rolled article (i.e. provide a smooth "glazing" roller instead of one with raised designs).

Claims 26, 28-30, 39, 40-41, 43, and 51-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scher and Schmoock, further in view of MacQueen et al. (U.S. Patent 6,399,670).

Regarding Claim 26, Scher shows the process as claimed as discussed in the rejection of Claim 1 above, but he does not show using a specific lacquer. MacQueen shows a process

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including a method wherein the lacquer consists of an acrylic lacquer (Column 5, lines 29-31; It is noted that "acrylate" is a polymer of acrylic molecules). MacQueen and Scher are combinable because they are concerned with a similar technical field, namely, methods of molding laminates. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use MacQueen's acrylic lacquer in Scher's and Schmoock's molding process in order to produce an article having properties of an acrylic lacquer.

Regarding Claim 28, Scher shows the process as claimed as discussed in the rejection of Claim 1 above, but he does not specify using a wear layer with particles. MacQueen shows a process including a method wherein the wear layer includes hard particles with an average particle size in the range of 50nm-150um (Column 8, lines 41-48). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use MacQueen's particled wear layer in Scher's and Schmoock's molding process in order to produce an article having a wear layer with desired properties.

Regarding Claim 29, Scher shows the process as claimed as discussed in the rejection of Claim 1 above, but he does not require the use of particle board. MacQueen shows a process including a method wherein the base layer consists of a particle board (Column 9, lines 22-25). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use MacQueen's particle board in Scher's and Schmoock's molding process to provide a sturdy core layer for the end product.

Regarding Claim 30, Scher shows the process as claimed as discussed in the rejection of Claim 1 above, but he does not show using a base polymer. MacQueen shows a process including a method wherein the base layer consists mainly a polymer (Column 9, lines 22-24; Column 23, line 23). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use MacQueen's base polymer in Scher's and Schmoock's molding process in order to provide the desired base layer properties for the end use article.

Regarding Claim 39, Scher shows the process as claimed as discussed in the rejection of Claim 1 above, but he does not show using a specific counter stay roller. MacQueen shows a process including a method wherein each structured roller is provided with a counter stay roller between which the surface element is passed (Column 23, lines 34-38). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use MacQueen's counter stay roller in Scher's and Schmoock's molding process in order to provide accurate control of pressure during the embossing process.

Regarding Claim 40, Scher shows the process as claimed as discussed in the rejection of Claims 1 and 32 above, but he does not show using a specific counter stay roller.

MacQueen shows a process including a method wherein each structured roller is provided with a counter stay roller between which the surface element is passed (Column 23, lines 34-38). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use MacQueen's counter stay roller in Scher's and Schmoock's molding process in order to provide accurate control of pressure during the embossing process.

Regarding Claim 41, Scher shows the process as claimed as discussed in the rejection of Claim 1 and 39 above, but he does not give a specific surface element thickness. MacQueen shows a process including a method wherein the surface element has a thickness T and that the distance between each structured roller is a specific value (Column 23, lines 47-50; Table 10). Although he does not specifically disclose that the distance between each structured roller and the corresponding counter stay is set in the range of T minus 0.5mm-1.2mm, he suggests that it would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to vary the gap between the two rolls in order to obtain a desired thickness of the final article (Column 25, lines 15-21, 31-32). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use MacQueen's thickness guidelines in Scher's and Schmoock's molding process in order to obtain an article that satisfies end-use specifications.

Regarding Claim 43, Scher shows the process as claimed as discussed in the rejection of Claim 1, 32, and 40 above, but he does not give a specific surface element thickness.

MacQueen shows a process including a method wherein the surface element has a thickness T and that the distance between each glazing roller is a specific value (Column 23, lines 47-50; Table 10). Although he does not specifically disclose that the distance between each glazing roller and the corresponding counter stay is set in the range of T minus 0.7mm-1.2mm, he suggests that it would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to vary the gap between the two rolls in order to obtain a desired thickness of the final article (Column 25, lines 15-21, 31-32). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use MacQueen's thickness guidelines in Scher's and Schmoock's molding process in order to obtain an article that satisfies end-use specifications.

Regarding Claim 51, Scher shows the process as claimed as discussed in the rejection of Claim 1, 39, and 41 above, but he does not give a specific surface element thickness. MacQueen shows a process including a method wherein the surface element has a thickness T and that the distance between each structured roller is a specific value (Column 23, lines 47-50; Table 10). Although he does not specifically disclose that the distance between each structured roller and the corresponding counter stay is set in the range of T minus 0.7mm-

0.9mm, he suggests that it would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to vary the gap between the two rolls in order to obtain a desired thickness of the final article (Column 25, lines 15-21, 31-32). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use MacQueen's thickness guidelines in Scher's and Schmoock's molding process in order to obtain an article that satisfies end-use specifications.

Regarding Claim 52, Scher shows the process as claimed as discussed in the rejection of Claim 1, 32, and 43 above, but he does not give a specific surface element thickness.

MacQueen shows a process including a method wherein the surface element has a thickness T and that the distance between each structured roller is a specific value (Column 23, lines 47-50; Table 10). Although he does not specifically disclose that the distance between each structured roller and the corresponding counter stay is set in the range of T minus 0.7mm-0.9mm, he suggests that it would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to vary the gap between the two rolls in order to obtain a desired thickness of the final article (Column 25, lines 15-21, 31-32). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use MacQueen's thickness guidelines in Scher's and Schmoock's molding process in order to obtain an article that satisfies end-use specifications.

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Scher and Schmoock, further in view of Correll et al. (U.S. Patent 6,238,750). Scher shows the process as claimed as discussed in the rejection of Claim 1 above, but he does not specifically show applying a wear layer in several steps with intermediate partial curing between said steps by applying a UV or electron beam. Correll et al., hereafter "Correll," show that it is known to carry out a method including applying a wear layer in several steps with intermediate partial curing between said steps by applying a UV or electron beam (Column 6, lines 66-67; Column 7, lines 1-2; Column 8, lines 20-22; Column 8, lines 60-63). Correll and Scher are combinable because they are concerned with a similar technical field, namely, methods of molding multilayer articles. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Correll's intermediate curing by applying a UV or electron beam during Scher's molding process in order to achieve quick and accurate curing to the desired level each time.

Claims 33-34, 45, 50, and 56-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scher and Schmoock, in view of Petry (U.S. Patent 3,196,030).

Regarding Claim 33, Scher shows the process as claimed as discussed in the rejection of Claims 1 and 32 above, but he does not show operating the rolls at a specific temperature. Petry shows that it is known to carry out a process for making a decorative article wherein the structured rollers are heated to a surface temperature (ST) above 40°C (Column 9, lines 46-48). Petry and Scher are combinable because they are concerned with a similar technical field, namely, methods of making a decorative article. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to operate Scher's process at Petry's temperature in order to avoid damaging the molding material due to the rollers being too hot, or prolonging cycle time due to the rollers being too cold.

Regarding Claim 34, Scher shows the process as claimed as discussed in the rejection of Claims 1 and 32 above, but he does not show operating the rolls at a specific temperature. Petry shows that it is known to carry out a process for making a decorative article wherein the structured rollers are heated to a surface temperature (ST) above 30°C (Column 9, lines 46-48). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to operate Scher's process at Petry's temperature in order to avoid damaging the molding material due to the rollers being too hot, or prolonging cycle time due to the rollers being too cold.

Regarding Claim 45, Scher shows the process as claimed as discussed in the rejection of Claim 1 above, but he does not show operating the rolls at a specific temperature. Petry shows that it is known to carry out a process for making a decorative article wherein the structured surface of the mold is heated to a surface temperature (ST) above 40°C (Column 9, lines 46-48). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to operate Scher's process at Petry's temperature in order to avoid damaging the molding material due to the rollers being too hot, or prolonging cycle time due to the rollers being too cold.

Regarding Claim 50, Scher shows the process as claimed as discussed in the rejection of Claims 1 and 30 above, but he does not show using a specific polymer. Petry shows that it is known to carry out a process for making a decorative article wherein the polymer of the base layer is polyurethane (Column 5, lines 3-8). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Petry's polymer in Scher's process in order to obtain an article useful in situations that are amenable to polyurethane.

Regarding Claim 56, Scher shows the process as claimed as discussed in the rejection of Claims 1 and 45 above, but he does not show operating the rolls at a specific temperature. Petry shows that it is known to carry out a process for making a decorative article wherein the temperature (ST) is in the range of 50-150°C (Column 9, lines 46-48). It would have been

prima facie obvious to one of ordinary skill in the art at the time the invention was made to operate Scher's process at Petry's temperature in order to avoid damaging the molding material due to the rollers being too hot, or prolonging cycle time due to the rollers being too cold.

Regarding Claim 57, Scher shows the process as claimed as discussed in the rejection of Claims 1, 32, and 33 above, but he does not show operating the rolls at a specific temperature. Petry shows that it is known to carry out a process for making a decorative article wherein the structured rollers are heated to a surface temperature (ST) is in the range of 50-150°C (Column 9, lines 46-48). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to operate Scher's process at Petry's temperature in order to avoid damaging the molding material due to the rollers being too hot, or prolonging cycle time due to the rollers being too cold.

Regarding Claim 58, Scher shows the process as claimed as discussed in the rejection of Claims 1, 32, and 34 above, but he does not show operating the rolls at a specific temperature. Petry shows that it is known to carry out a process for making a decorative article wherein the rollers are heated to a surface temperature (ST) is in the range of 35-100°C (Column 9, lines 46-48). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to operate Scher's process at Petry's temperature in order to avoid damaging the molding material due to the rollers being too hot, or prolonging cycle time due to the rollers being too cold.

Claims 35-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scher and Schmoock, in view of Eby et al. (U.S. Patent 5,961,903).

Regarding Claim 35, Scher shows the process as claimed as discussed in the rejection of Claim 1 above, but he does not show the application of an additional top coat applied to the article. Eby et al., hereafter "Eby," show that it is known to carry out a method of making an article with a surface structure, wherein a thin top coat is applied on top of the structured wear layer (Column 8, lines 28-31). Eby and Scher are combinable because they are concerned with a similar technical field, namely, methods which yield articles having a structured decorative surface. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Eby's top coat during Scher's method in order to provide extra protection for the top wear layer.

Regarding Claim 36, Scher shows the process as claimed as discussed in the rejection of Claims 1 and 32 above, but he does not show the application of an additional top coat applied to the article. Eby shows that it is known to carry out a method of making an article with a surface structure, wherein a thin top coat is applied on top of the structured wear layer

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after the glazing stage (Column 8, lines 28-31). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Eby's top coat during Scher's method in order to provide extra protection for the top wear layer.

Regarding Claim 37, Scher shows the process as claimed as discussed in the rejection of Claims 1 and 32 above, but he does not show the application of an additional top coat applied to the article. Eby shows that it is known to carry out a method of making an article with a surface structure, wherein a thin top coat is applied on top of the structured wear layer before the glazing stage and that the top coat is partially cured before glazing (Column 7, lines 65-67; Column 8, lines 1-4). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Eby's top coat during Scher's method in order to provide extra protection for the top wear layer.

Regarding Claim 38, Scher shows the process as claimed as discussed in the rejection of Claims 1 and 35 above, but he does not show the application of an additional top coat applied to the article. Eby shows that it is known to carry out a method of making an article with a surface structure, wherein the top coat is comprised of acrylic (Column 11, lines 4-5; It is noted that the clause that follows "optionally" has been considered, but as this is an alternative limitation, it is not deemed necessary for the instant invention.). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Eby's acrylic top coat during Scher's method in order to provide extra protection for the top wear layer.

Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Scher and Schmoock, in view of Nishimura et al. (U.S. Patent 4,216,251). Scher shows the process as claimed as discussed in the rejection of Claim 1 above, but he does not show the presence of an elastic component in his article. Nishimura et al., hereafter "Nishimura," show that it is known in the prior art to carry out a method of making an article with a decorative surface, wherein the surface element contains a layer which is elastic at least before the complete curing, the elastic layer being the base layer (Column 1, lines 40-41). Nishimura and Scher are combinable because they are concerned with a similar technical field, namely, methods which yield decorative articles. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Nishimura's elastic component in Scher's process in order for the final product to be used in varying situations which require bending.

Claims 42 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scher, Schmoock, and MacQueen, in view of Schmid et al. (U.S. Patent 5,804,116).

Regarding Claim 42, Scher shows the process as claimed as discussed in the rejection of Claims 1, 39, and 41 above, but he does not teach a specific pressure which is applied to the article. Schimd et al., hereafter "Schmid," show that it is known to carry out a method of making an article with a surface structure, wherein the pressure between each structured roller and its corresponding counters stay is 50-200 Bar (Column 9, lines 27-29). Schmid and Scher are combinable because they are concerned with a similar technical field, namely, molding processes which yield articles having a designed surface structure. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Schmid's pressure from Scher's rollers in order to produce the desired amount of compression of the article.

Regarding Claim 53, Scher shows the process as claimed as discussed in the rejection of Claims 1, 39, 41, and 42 above, but he does not teach a specific pressure which is applied to the article. Schimd shows that it is known to carry out a method of making an article with a surface structure, wherein the pressure is 65-100 Bar (Column 9, lines 27-29). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Schmid's pressure from Scher's rollers in order to produce the desired amount of compression of the article.

Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over Scher, Schmoock, and MacQueen, in view of Greten et al. (U.S. Patent 5,498,309). Scher shows the process as claimed as discussed in the rejection of Claims 1, 32, 40, and 43 above, but he does not show a specific pressure which is applied to the article. Greten et al., hereafter "Greten," show that it is known to carry out a method of making an article with a surface structure, wherein the pressure is 0.1-10 Bar (Column 2, lines 7-8). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Greten's pressure from Scher's rollers in order to produce the desired amount of compression of the article.

Claims 46 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scher, Schmoock and Petry, as applied to claims 1 and 45 above, further in view of Schmid.

Regarding Claim 46, Scher shows the process as claimed as discussed in the rejection of Claims 1 and 45 above, but he does not teach a specific pressure which is applied to the article. Schimd shows that it is known to carry out a method of making an article with a surface structure, wherein the pressure is 50-200 Bar (Column 9, lines 27-29). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made

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to use Schmid's pressure from Scher's rollers in order to produce the desired amount of compression of the article.

Regarding Claim 55, Scher shows the process as claimed as discussed in the rejection of Claims 1, 45, and 46 above, but he does not teach a specific pressure which is applied to the article. Schimd shows that it is known to carry out a method of making an article with a surface structure, wherein the pressure is 65-100 Bar (Column 9, lines 27-29). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Schmid's pressure from Scher's rollers in order to produce the desired amount of compression of the article.

Claims 47-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scher, Schmoock, and MacQueen, in view of James et al. (U.S. Patent 6,354,915).

Regarding Claims 47 and 48, Scher shows the process as claimed as discussed in the rejection of Claims 1 and 28 above, but he does not specify the identity of the hard particles in the wear layer. James et al., hereafter "James," show that it is known to carry out a method of making articles with specific surface structures, wherein (Claim 47) hard particles comprise silicon carbide (Column 3, lines 2-4), and (Claim 48) a part of the hard particles comprise silicon carbide, while another amount of the hard particles consist of diamond (Column 3, lines 2-4). James and Scher are combinable because they are concerned with a similar technical field, namely, molding processes which yield articles recognized for their surface structure. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use James' hard particles in Scher's molding process in order to yield an article useful in situations calling for those specific hard particles.

Regarding Claim 49, Scher shows the process as claimed as discussed in the rejection of Claims 1, 28, and 48 above, including a method wherein the hard particles have an average size range of 50nm-2um (Column 8, lines 41-48). He does not show the use of diamond particles. James shows that it is known to carry out a method of making articles with specific surface structures, wherein the hard particles consist of diamond and are placed close to the upper surface of the wear layer (Column 3, lines 2-4; Column 5, lines 59-61). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to place James' diamond particles close to the surface of Scher's formed article in order for them to be more visible and/or useful.

Claim 54 is rejected under 35 U.S.C. 103(a) as being unpatentable over Scher, Schmoock, and MacQueen, as applied to claim 43 above, and further in view of Schmid. Scher

shows the process as claimed as discussed in the rejection of Claims 1 and 44 above, but he does not teach a specific pressure which is applied to the article. Schimd shows that it is known to carry out a method of making an article with a surface structure, wherein the pressure is 65-100 Bar (Column 9, lines 27-29). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Schmid's pressure from Scher's rollers in order to produce the desired amount of compression of the article.

Claim 59 is rejected under 35 U.S.C. 103(a) as being unpatentable over Scher, in view of Schmoock, further in view of MacQueen, Petry, and James. Scher shows that it is known to carry out a method for the manufacture of a decorative surface element, which element comprises a base layer, a décor layer of a lacquer, and a wear layer (Abstract), the process comprising the steps positioning one or more structured rollers or molds on top of the lacquer, the one or more rollers or molds provided with embossing rollers (Column 5, lines 3-13; Column 6, lines 50-64), pressing said one or more rollers or molds into said lacquer, whereby the lacquer will be provided with a surface structure, thereby enhancing the decorative effect of the décor (Column 6, lines 50-64; Column 7, lines 36-68), and thereafter curing the wear layer (Column 10, lines 6-18).

Scher does not show using a UV curable resin in his decorative surface element. Schmoock shows that it is known to carry out a method for making a decorative surface element using a layer of UV curing lacquer (Column 4, lines 11-13). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Schmoock's UV curing lacquer as a layer in Scher's decorative element in order to enable the article to be cured by methods other than convection.

Scher does not show using a specific lacquer. MacQueen shows a process including a method wherein the lacquer consists of an acrylic lacquer (Column 5, lines 29-31; It is noted that "acrylate" is a polymer of acrylic molecules). MacQueen and Scher are combinable because they are concerned with a similar technical field, namely, methods of molding laminates. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use MacQueen's acrylic lacquer in Scher's and Schmoock's molding process in order to produce an article having properties of an acrylic lacquer.

Scher does not specify using a wear layer with particles. MacQueen shows a process including a method wherein the wear layer includes hard particles with an average particle size in the range of 50nm-150um (Column 8, lines 41-48). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use MacQueen's

particled wear layer in Scher's and Schmoock's molding process in order to produce an article having a wear layer with desired properties.

Scher does not require the use of particle board. MacQueen shows a process including a method wherein the base layer consists of a particle board (Column 9, lines 22-25). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use MacQueen's particle board in Scher's and Schmoock's molding process to provide a sturdy core layer for the end product.

Scher does not give a specific surface element thickness. MacQueen shows a process including a method wherein the surface element has a thickness T and that the distance between each structured roller is a specific value (Column 23, lines 47-50; Table 10). Although he does not specifically disclose that the distance between each structured roller and the corresponding counter stay is set in the range of T minus 0.5mm-1.2mm, he suggests that it would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to vary the gap between the two rolls in order to obtain a desired thickness of the final article (Column 25, lines 15-21, 31-32). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use MacQueen's thickness guidelines in Scher's and Schmoock's molding process in order to obtain an article that satisfies end-use specifications.

Scher does not show operating the rolls at a specific temperature. Petry shows that it is known to carry out a process for making a decorative article wherein the structured surface of the mold is heated to a surface temperature (ST) above 40°C (Column 9, lines 46-48). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to operate Scher's process at Petry's temperature in order to avoid damaging the molding material due to the rollers being too hot, or prolonging cycle time due to the rollers being too cold.

Scher does not specify the identity of the hard particles in the wear layer. James shows that it is known to carry out a method of making articles with specific surface structures, wherein (Claim 47) hard particles comprise silicon carbide (Column 3, lines 2-4), and (Claim 48) a part of the hard particles comprise silicon carbide, while another amount of the hard particles consist of diamond (Column 3, lines 2-4). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use James' hard particles in Scher's molding process in order to yield an article useful in situations calling for those specific hard particles.

(10) Response to Argument

A.

Appellant contends that Scher does not teach a wear layer; instead Scher teaches a layer of melamine resin and pigment which coats the design layer. This is not persuasive because it is being interpreted that Scher's pigment/resin layer meets the limitation of Appellant's wear layer, as no particular properties or structure are claimed but rather that it simply covers a décor layer. It is noted that the wear layer is not required to be an outer layer. It is noted that Scher was not cited to show a UV curing lacquer that is cured with a UV beam.

Appellant contends that because the materials of Scher and Correll are different and necessarily have different properties, one of ordinary skill would not make the proposed combination. This is not persuasive because there is no evidence to support this assertion, and arguments of attorneys cannot take the place of evidence in the record (See MPEP 2145). Further, Appellant contends that there is no indication that the dry powder of Correll would flow under any conditions. This is not persuasive because Correll was not cited to show flow properties of a layer material; Correll was only cited to show intermittent application of a wear layer with intervening curing steps.

В.

Appellant contends that the combination of Scher and Schmoock do not suggest the possibility of glazing rollers. This is not persuasive because it is maintained that Scher and Schmoock suggest that rollers can be provided to inflict any desired surface texture, and it is maintained that a glazed surface could include that which is merely smooth. Appellant contends that a glazed surface is more than simply smooth, however this is not persuasive because the claim can be interpreted broadly to include rollers which simply give a glassy (i.e. glazed) surface (i.e. polish) to the molded article.

C.

Appellant contends that Scher, Schmoock and Petry fail to suggest the claimed invention because Petry does not cure the alleged deficiencies of Scher and Schmoock. This is not persuasive because it is believed that the Scher and Schmoock do suggest the claimed invention, as noted above.

D.

Appellant contends that Scher, Schmoock and Eby fail to suggest the claimed invention because Eby does not cure the alleged deficiencies of Scher and Schmoock. This is not

persuasive because it is believed that the Scher and Schmoock do suggest the claimed invention, as noted above.

E.

Appellant contends that Scher, Schmoock and Greten fail to suggest the claimed invention because Greten does not cure the alleged deficiencies of Scher and Schmoock. This is not persuasive because it is believed that the Scher and Schmoock do suggest the claimed invention, as noted above.

F.

Appellant contends that Scher, Schmoock and Schmid fail to suggest the claimed invention because Schmid does not cure the alleged deficiencies of Scher and Schmoock. This is not persuasive because it is believed that the Scher and Schmoock do suggest the claimed invention, as noted above.

G.

Appellant contends that Scher, Schmoock, and MacQueen do not suggest the instant invention because MacQueen does not cure the alleged deficiencies of Scher and Schmoock. This is not persuasive because it is believed that the Scher and Schmoock do suggest the claimed invention, as noted above.

Further, Appellant contends that MacQueen does not show counter stay rollers. This is not persuasive because MacQueen shows that it is known to pass a molded material through a gap between an upper and a lower roll; one of the rollers (upper) will act to provide a texture and the other roller (lower) will act as a counter stay roller, although it is not precisely termed a "counter stay roller".

With respect to the claimed distances, it is interpreted MacQueen suggests that the distance between the rollers can be varied depending on the desired final thickness for the molded article (see MacQueen, Column 25, lines 15-21, 21-41).

H.

In response to Appellant's argument that the examiner has combined an excessive number of references, reliance on a large number of references in a rejection does not, without more, weigh against the obviousness of the claimed invention. See *In re Gorman*, 933 F.2d 982, 18 USPQ2d 1885 (Fed. Cir. 1991).

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Appellant contends that the Examiner has relied upon impermissible hindsight when suggesting the combination of Scher, Schmoock, and MacQueen would be obvious in order to produce an article having properties of acrylic lacquer. This motivation is maintained because there are many desirable properties of acrylic lacquer which may be requested by consumers such as ability of the acrylic lacquer to enhance colors and textures of the coated articles.

(11) Related Proceeding(s) Appendix

For the above reasons, it is believed that the rejections should be sustained. Respectfully submitted,

/Monica A Huson/ Monica A Huson

Conferees:

/Romulo H. Delmendo/

Romulo H. Delmendo, Appeal Conferee

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